

NON-PUBLIC?: N
ACCESSION #: 8906050216
LICENSEE EVENT REPORT (LER)

FACILITY NAME: PLANT VOGTLE - UNIT 2 PAGE: 1 OF 3

DOCKET NUMBER: 05000425

TITLE: TURBINE TRIP DEVICE TESTING LEADS TO TURBINE/REACTOR TRIP
EVENT DATE: 05/02/89 LER #: 89-019-00 REPORT DATE: 05/30/89

OPERATING MODE: 1 POWER LEVEL: 063

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR
SECTION
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: R.M. ODOM, NUCLEAR SAFETY COMPLIANCE MANAGER
TELEPHONE: (404)826-3201

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE TO NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On 5-2-89, personnel were performing a check of turbine trip devices per procedure 14286-2, "Weekly Turbine Trip Device Operability Test", prior to placing the turbine in standby. An overspeed trip device test malfunctioned and, after consulting the turbine vendor representative, the operator attempted to reset the malfunction using the "STOP/GO NORMAL" button. When this button was pushed and released, at 1102 CDT, the turbine tripped which resulted in a reactor trip.

Prior to the turbine trip, a defective weld in a one inch steam line was releasing steam into an area under the turbine front standard where the turbine trip device controls are located. The cause of the turbine trip has not been determined despite extensive troubleshooting. However, it could be postulated that the steam leak affected mechanical or electrical components to produce the trip. Following the trip, the weld was repaired and the trip device operability tests were repeated several times but the turbine trip device malfunction could not be duplicated.

END OF ABSTRACT

TEXT PAGE 2 OF 3

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73(a)(2)(iv) because an unplanned Reactor Protection System actuation occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 2 was operating in Mode 1 (Power Operations) at 63% rated thermal power. Other than that described herein, there was no inoperable equipment which contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On 5-2-89, personnel were performing a check of turbine trip devices per procedure 14286-2, "Weekly Turbine Trip Device Operability Test", prior to placing the turbine in standby. A system malfunction light illuminated during the testing of the mechanical overspeed trip circuit. The test was terminated and, after consulting with the turbine vendor (General Electric) representative, the operator attempted to reset the malfunction using the "STOP/GO NORMAL" button. When this button was pushed and released, at 1102 CDT, the turbine tripped which resulted in a reactor trip. Control rods inserted, the Main Feedwater System isolated and the Auxiliary Feedwater (AFW) System actuated. Control room personnel responded as required per the plant emergency operating procedures.

D. CAUSE OF EVENT

Pushing the "STOP/GO NORMAL" button is the proper way to reset the malfunction experienced, and this should not have led to a turbine trip. Prior to the turbine trip, a defective weld joint in a one inch steam line had cracked and was found to be releasing steam into an area under the turbine front standard where the turbine trip device controls are located. It could be postulated that the steam leak affected mechanical or electrical components to produce the trip. Additionally, vendor information showed that a condition may exist which could cause a turbine trip during overspeed trip device testing due to improper machining of mechanical latching "fingers". However, an inspection found the latching fingers to be machined within proper tolerances. The cracked weld was repaired and the trip device operability tests were repeated several times but the turbine trip device malfunction could not be duplicated.

E. ANALYSIS OF EVENT

When the reactor trip signal was initiated, control rods inserted. The Main Feedwater system isolated and the AFW system actuated. Plant personnel responded as required, and there were no safety system anomalies noted in the course of this event. Based on these considerations, it is concluded that there was no adverse affect on plant safety or public health and safety as a result of this event.

F. CORRECTIVE ACTION

Troubleshooting of the turbine trip device components was performed and the operability tests were repeated several times but neither the turbine trip or the malfunction could be duplicated. The defective weld on the one inch steam line was repaired and electrical covers were, inspected for tightness.

G. ADDITIONAL INFORMATION

1. Fail
d Component
1" (one inch), carbon steel, socket joint, pipe weld supplied by
General Electric Company
2. Previous Similar Events
None
3. Energy Industry Identification System Code:
Main Feedwater System - SJ
Auxiliary Feedwater System - BA
Control Rod Drive System - AA
Main Turbine System - TA
Main Steam system - SB

ATTACHMENT 1 TO 8906050216 PAGE 1 OF 1

Georgia Power Company
333 Piedmant Avenue
Atlanta, Georgia 30308
Telephone 404 526-3195

Mailing Address
40 Inverness Center Parkway
Post Office Box 1295

Birmingham, Alabama 35201
Telephone 205 868-5581

May 30, 1989

ELV-00526
1451n

W.G. Hairston, III
Senior Vice President
Nuclear Operations

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

PLANT VOGTLE - UNIT 2
NRC DOCKET 50-425
OPERATING LICENSE NPF-81
LICENSEE EVENT REPORT
TURBINE TRIP DEVICE TESTING
LEADS TO TURBINE/REACTOR TRIP

Gentlemen:

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to an event which occurred on May 2, 1989.

Sincerely,

W. G. Hairston, III

TEW/NJS/gm

Enclosure: LER 50-425/1989-019

xc: Georgia Power Company
Mr. P. D. Rice
Mr. C. K. McCoy
Mr. G. Bockhold, Jr.
Mr. M. Sheibani
Mr. J. P. Kane
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebnetter, Regional Administrator

Mr. J. B. Hopkins, Licensing Project Manager, NRR
Mr. J. F. Rogge, Senior Resident Inspector, Yogle

*** END OF DOCUMENT ***
